### **FY 2015 WINDOW SERVICE COSTS BY SHAPE**

#### I. PREFACE

## A. Purpose and Content

USPS-FY15-20 documents the development of window service volume-variable costs by shape for market dominant Presorted First-Class Mail, Standard Mail Regular, and Standard Mail ECR. It contains printed and electronic documentation of the spreadsheets and programs used to develop these costs.

#### **B. Predecessor Documents**

Docket No. R2006-1, USPS-LR-L-106. Docket No. ACR 2007, USPS-FY07-20. Docket No. ACR 2008, USPS-FY08-20. Docket No. ACR 2009, USPS-FY09-20. Docket No. ACR 2010, USPS-FY10-20. Docket No. ACR 2011, USPS-FY11-20. Docket No. ACR 2012, USPS-FY12-20. Docket No. ACR 2013, USPS-FY13-20. Docket No. ACR 2014, USPS-FY14-20.

## **C.** Corresponding Non-Public Document

There is no corresponding non-public document.

#### D. Methodology

This analysis uses the same methodology as described in Docket No. R2006-1, USPS-LR-L-106. This methodology was also used in Docket No. ACR2014, USPS-FY14-20, and predecessor documents provided with the 2008 through 2013 Annual Compliance Reports.

### E. Input/Output

USPS-FY15-20 relies upon the 2015 IOCS data set in USPS-FY15-NP21 and replicates cost distribution and cost pool assignment methodology in USPS-FY15-7. It also relies upon window service piggyback factors as developed in USPS-FY15-24, and ECR adjustment factors and volume inputs from USPS-FY15-26.

#### **II. ORGANIZATION**

The main results are presented in the Microsoft Office Excel workbook 'FY15 Window Service Costs.xls' in the worksheet 'FY15 Adj Costs.' These results are also reported in Table 1, below. Data sources are referenced in each spreadsheet in the Microsoft Office Excel workbook 'FY15 Window Service Costs.xls.' The programs and workbooks used to estimate these costs are described in the Program Documentation section below.

			FY15	Adj
Subclass	Shape	FY15 Costs	Piggyback Factor *	FY15 Costs
	Letters	19,797	1.4321	28,351
	Flats	2,997	1.4321	4,292
	Total	22,794		32,644
Standard ECR - High Density/Sa	turation			
Ç ,	Letters	1,529	1.4321	2,189
	Flats	1,409	1.4321	2,017
	Parcels	0	1.4321	0
	Total	2,937		4,207
Standard ECR - Carrier Route				
	Letters	288	1.4321	413
	Flats	2,493	1.4321	3,570
	Parcels	0	1.4321	0
	Total	2,781		3,983
Standard Mail Regular				
G	Letters	44,986	1.4321	64,424
	Flats	6,013	1.4321	8,611
	Parcels	1,006	1.4321	1,440
	Total	52,005		74,476

<sup>\*</sup> Source: USPS-FY15-24; FY15Public.PB.xls, worksheet 'Window'

#### III. PROGRAM DOCUMENTATION

## 1. Computer Hardware and Software

The FORTRAN programs are run on a HP ProLiant DL560 Gen 8 with four Intel Xeon E5-4650 (each with 8 cores @ 2.70GHz) microprocessors and 256 GB of RAM. The operating system on this computer is Red Hat Enterprise Linux Server release 6.6 (Santiago) with the kernel 2.6.32-504.23.4.el6.x86\_64. FORTRAN programs are compiled using GFORTRAN from GNU Compiler Collection (GCC) version 4.4.7, which can be downloaded from <a href="http://gcc.gnu.org/fortran">http://gcc.gnu.org/fortran</a>. The manual processing spreadsheet work is performed on PCs running the Windows 7 (64-bit) Professional Service Pack 1 operating system and using Microsoft Office Excel 2013 (64-bit) from the Microsoft Office Professional Edition 2013 (64-bit).

USPS-FY15-20 includes electronic versions of all relevant programs, maps, and data files. The compiler used to run the PC-based FORTRAN programs can be downloaded freely from <a href="http://gcc.gnu.org/wiki/GFortranBinaries">http://gcc.gnu.org/wiki/GFortranBinaries</a>. Download the Windows 64-bit version of GFORTRAN. To compile use the command line: x86\_64-pc-mingw32-gfortran.exe -O2 -ffixed-line-length-132 -finit-local-zero - fbounds-check -o {executable name} {program name.f}. The PC-based FORTRAN programs should be run in the same order as the programs are described below.

# 2. Preparation of the IOCS Clerk and Mail Handler Data

The following program extracts clerk and mail handler tallies from the 2015 IOCS data set and prepares the tallies for the volume-variable cost distribution for both mail processing and administration/window service costs for clerks and mail handlers as described in USPS-FY15-7.

Program:

**cadoc15\_prc.f** – Separates the clerk and mail handler tallies from the entire 2015 IOCS data set, separates the tallies between mail processing and administrative/window service, and assigns a cost pool to each tally using the method described in USPS-FY15-7.

Input: FY15 IOCS Data – Text flat file version of the submitted

SAS IOCS nonpublic data set (USPS-FY15-NP21)
iocs2015\_np.h – Declaration of IOCS tally fields
mods\_fin15.prn – List of MODS 1&2 finance numbers
used to identify MODS 1&2 offices (USPS-FY15-7)
costpools15.prn – Map of mail processing cost pools

Output: **clk\_mh\_mp15.dat** – IOCS mail processing tallies

clk mh aw15.dat – IOCS administrative and window

service tallies

## 3. Cost Estimates – Clerks and Mail Handlers, Window Service

The following FORTRAN programs replicate the function of the window service and administrative cost distribution SAS programs documented in USPS-FY15-7. The results of these programs are exported into Microsoft Office Excel where final results are summarized and reported.

Program: admwin\_set.f – Prepares administration and window service IOCS

tallies for the cost estimation program. Converts tally dollar values

(F9250) to cost pool dollars and assigns the tally to a CAG

category.

Input: **fincag.15** – List of tally finance numbers and CAG

iocs2015\_np.h - Declaration of IOCS tally fields
clk mh aw15.dat - IOCS administrative and window

service tallies

Output: **admwin15.dat** – Administrative and window service

tallies used for the cost estimation for all office types

Program: admwin2a.f – Estimates the window service costs for clerks and

mail handler tallies by activity code

Input: iocs2015\_np.h – Declaration of IOCS tally fields

actv intl win15.prn - List of the direct and class

specific mixed mail activity codes

**admwin15.dat** – Administrative and window service tallies used for the cost estimation for all office types

Output: windist15.data – Estimated window service costs by

activity code

Program: **sumclass win.f** – Rolls up the window service cost estimates from

activity code to subclass

Input: **actv intl win15.prn** – List of activity codes and

corresponding subclass category codes

**classes win15.prn** – List of CRA subclasses

windist15.data – Estimated window service costs by

activity code

Output: wincost15.csv – Window service cost estimates for

First-Class Mail Presort, Standard Mail ECR, and

Standard Mail Regular by shape

Workbook: FY15 Window Service Costs.xls – Calculates FY15 CRA window

service (C/S3.2) costs by shape

Input: wincost15.csv – Window service cost estimates for

First-Class Mail Presort, Standard Mail ECR, and

Standard Mail Regular by shape

FY15 CRA Window Service Costs – CRA

worksheet 3.2.1 and 3.2.2 (USPS-FY15-1, CS03.xls)

**FY15 RPW Volumes** – USPS-FY15-26

FY15 Piggyback factors by CRA cost segments -

USPS-FY15-24

**ECR HD/Saturation Adjustment Factor** – USPS-FY15-

26